

SECTION 2.0

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

2.1 INTRODUCTION

A range of alternatives to the Proposed Action were identified and evaluated to determine if they were reasonable, i.e. meet the purpose and need. Any alternative that did not meet the purpose and need was not evaluated further. While a “No-Action” alternative may not address an identified area of need, evaluation of the “No-Action” alternative is required per CEQ regulations. The “No-Action” alternative serves as a basis of comparison.

2.2 PROPOSED ACTION

The Proposed Action is to construct a new terminal of a minimal 35,000 SF and associated apron of a minimal 100,000 SF to meet the current passenger and safety demands. A new passenger parking and rental car lot will also be constructed adjacent to the terminal area to accommodate current passenger and employee demand, and the grading of land to build a 100 contiguous acre aerotech business park that will have direct runway access. To accomplish this, the area of the proposed terminal requires filling and stabilization. This fill will be provided through excavation and relocation of approximately three million cubic yards of earth from an area near the end of Taxiway H. The borrow area will be graded and stabilized and will serve as the footprint for the development of the proposed aerotech business park. In order to support this development, ancillary facilities will be constructed, including a new taxiway, widening of Taxiway H, and a new access road (Figure 4).

The Proposed Action will take place in an area that extends from Runway 3-21 to Heliport Loop Road. Currently this area consists of a topographical depression adjacent to the runway and WV 279, a hillside, and flat areas that have been previously leased out for temporary uses, totaling approximately 140 acres. Forty acres will be used to accommodate the new passenger terminal, new apron, parking lot, taxiway upgrades, and access road of the Proposed Action. The remaining 100 contiguous acres with direct runway access will be used for the aerotech business park. This would allow current tenants to expand in the additional areas, instead of relocating to other airports due to the current inability to expand at CKB, as well as to attract new tenants. As letters of support from several industry experts (Mid Atlantic Aerospace Complex, Aurora Boeing, and the WV Development Office) have all stated, a minimum of 100 acres of contiguous flat land with runway access is desired by potential clients.

The Proposed Action would allow for the separation of GA and commercial services by relocating the commercial terminal and apron to the northeast side of the airport and utilizing the current terminal apron as additional room for GA activity. The location of the terminal and apron would still provide a clear line of sight for the existing air traffic control tower (ATCT), which is an unobstructed view of aircraft from the ATCT cab to all areas identified as movement areas (aprons, taxiways, and runways). Please see Figure 4 for preliminary plans for the Proposed Action. The Proposed Action includes the following:

- Construction of a new minimum 35,000 SF terminal that will be able to house two gates and sized to handle the current passenger and safety demands. For the short-term, the current terminal will house the Fixed Base Operator for the airport after the new terminal has been constructed and facilities have been relocated. A long-term strategy for use of the current terminal has not been finalized;
- Construction of a new minimum 100,000 SF commercial apron that will be able to accommodate having two narrow body aircraft simultaneously on the apron, passenger boarding bridges for passengers to enter and exit the aircraft from the terminal gate, adequate room for movement of aircraft to push back from the gate, and distance behind the aircraft for a vehicle access aisle meeting the current need by the airport;

- Construction of a new surface parking lot for additional passenger/employee vehicular parking at the terminal and parking for rental car facilities. The new amount of parking will total at least 589 parking spaces to meet current needs;
- Widening and re-construction of Taxiway H;
- Construction of a new parallel taxiway connecting Taxiway H to the end of Runway 21. The construction of the new connector taxiway would limit crossing of the runway for arrivals and departures associated with the new terminal location, which would limit the opportunity for human error of an incursion;
- Construction of a new roadway entrance from WV 279 with an access road to the terminal and future access road to the aerotech business park, is a connected action and will be evaluated as part of this EA; and
- The demolition of four abandoned WV National Guard buildings, including office facilities and barracks which is a connected action and will be evaluated as part of this EA.

The Proposed Action will be constructed in two phases. The first phase (Phase I) will include construction related to terminal development, including all earthmoving and construction of terminal and supporting facilities (apron, taxiway, parking lot, access road). Phase I is anticipated to take 2.5 years to complete. The second phase (Phase II) will consist of acreage identified within the Proposed Action footprint to support the aerotech business park, where additional earthmoving is not required. It is anticipated it will take 20 years to reach full build out of the aerotech business park.

2.3 REQUESTED FEDERAL ACTIONS

- Unconditional approval of the Airport Layout Plan (ALP) to depict the proposed improvements pursuant to 49 USC §§ 40103(b) and 47107(a)(16), including new terminal location, apron and parallel taxiway.
- Determinations under 49 USC 47106 and 47107 relating to the eligibility of the Proposed Action for Federal funding under the Airport Improvement Program (AIP) and/or determinations under 49 USC 40117, as implemented by 14 CFR 158.25, to impose and use passenger facility charges (PFCs) collected at the airport to assist with construction of potentially eligible development items shown on the ALP, including the proposed construction of the parallel taxiway and commercial apron, actions that may directly or indirectly impact FAA facilities including, but not limited to, utility relocations. A PFC application has not yet been submitted to the FAA.

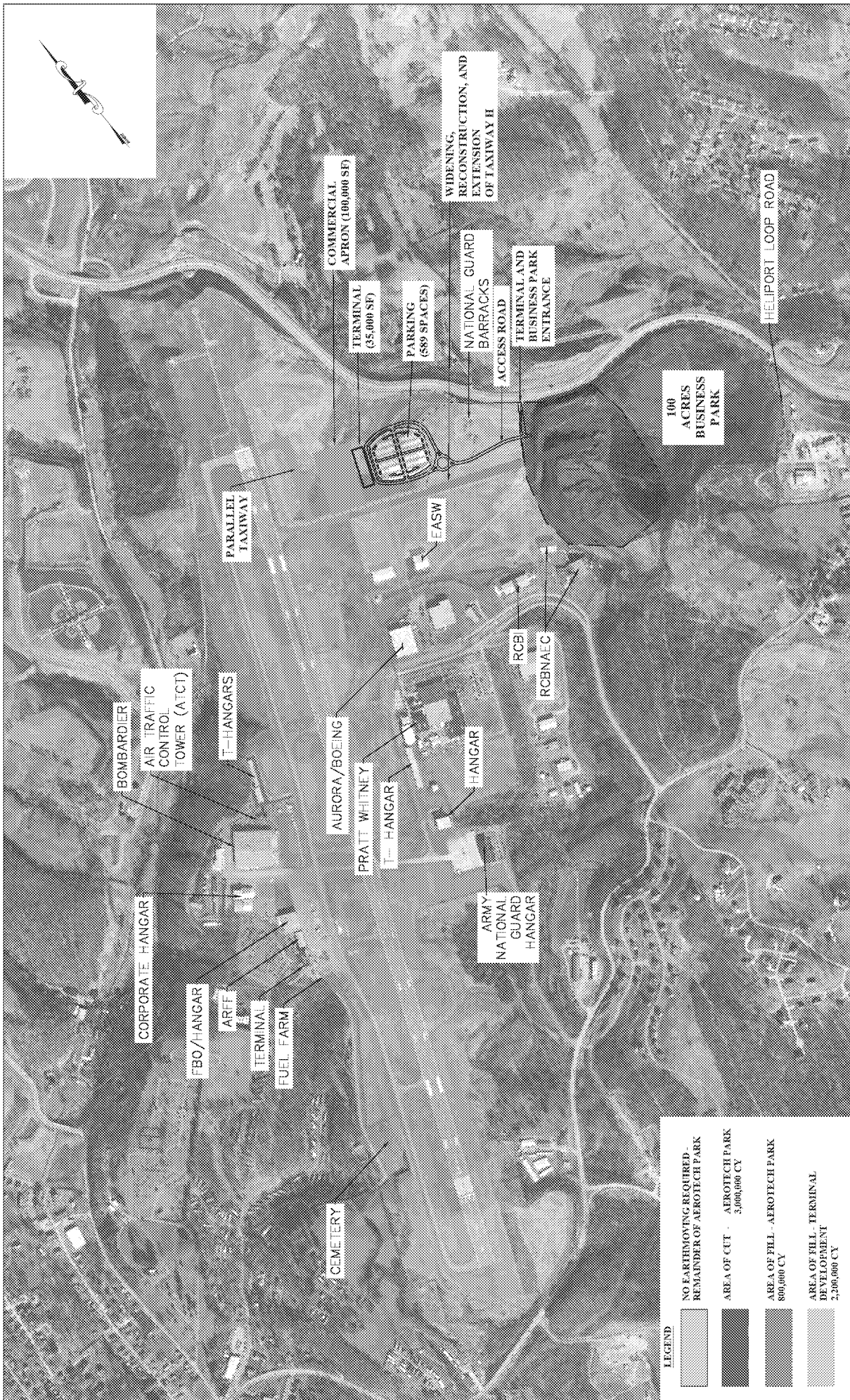


FIGURE 4 - PROPOSED ACTION

THRASHER

2.4 ALTERNATIVES

Screening criteria for the alternatives were based on the following:

- Does this meet the purpose and need?
- Does this provide better a customer experience and provide space for security requirements?
- Can the movement areas be seen by the ATCT?
- Does this provide safe movement of aircraft?
- Can the new parking area be separated for charged parking?
- Does this allow enough acreage to construct buildings that don't exceed the Part 77 surfaces?

Meeting the above criteria would create a larger, safer terminal capable of handling passenger demands that are not currently being met, expand the commercial apron to simultaneously accommodate two narrow body aircraft, and provide a parking lot capable of adding parking spaces to meet the passenger and airport staff demand. The need for the parking spaces comes from the Master Plan and 100 contiguous acres comes from the market study performed in 2019 in order to create an accommodating site for aeronautical development.

As a result of moving the terminal to the opposite side of the runway the following actions will also need to take place: widen and reconstruct Taxiway H, construct a new parallel taxiway connecting Taxiway H to Runway 21, and improve access to the terminal. Additional factors taken into consideration include the ability of the ATCT to remain in its current location, while still maintaining necessary line of sight, and a new access road with ingress/egress to WV 279.

2.4.1 Alternative 1: No-Action Alternative

The No-Action Alternative is where no action takes place. No changes would be made from the existing conditions and the terminal, apron, and the parking lot would remain in their current conditions. Based on these constraints, growth would be limited. The aerotech business park would also not be built and could force tenants to move off property to accommodate their need for growth, which is currently not available at CKB, and fail to attract new tenants. This alternative would not allow CKB to meet the stated purpose and need as identified in the Master Plan and to meet the current demands for safe, secure, and efficient airport operations. The No Action Alternative provides a baseline against which the Proposed Action can be compared.

2.5 ALTERNATIVES DISMISSED FROM FURTHER ANALYSIS

Various potential alternatives were evaluated to determine if they meet the purpose and need of the project. These alternatives were proposed and eliminated from further consideration due to constraints, lack of long-term viability, and/or failure to meet the purpose and need.

2.5.1 Alternative 2: Develop Property East of Runway 3-21

This alternative considers construction of the terminal on an existing parcel further east of the site than considered in the Proposed Action. There is available land to the east of Runway 3-21 that could be utilized for the new terminal and provide space for aeronautical development (Figure 5). Direct access to WV 279 and easier access to I-79 would be provided under this alternative. This alternative would allow for the construction of a new minimum 35,000 SF passenger terminal, a new minimum 100,000 SF commercial apron, and a 589-space parking lot that would all fit the purpose and need for a larger, safer terminal capable of handling current passenger demand; an apron large enough for two commercial aircraft to be parked side by side simultaneously; and enough parking for the airport passengers/staff all of which are currently not being met.

The location of the proposed terminal would not be able to be seen by the existing ATCT due to existing buildings (2- Aurora buildings and Engine Airframe Solutions Worldwide) obstructing the line of sight, creating a safety issue. Line of sight would be improved with demolition of these structures; however, these are businesses which need direct runway access and relocation of these businesses would take away from the available 100 contiguous acres for the aerotech business park. A proposed location for relocating the ATCT has been identified next to the Aurora hangar allowing visibility to the movement areas but would reduce the available acreage for the aerotech business park.

In addition, the terminal would require the construction of a parallel taxiway for the safety of taxiing aircraft, which would require fill to be placed to construct a stable pad level with the runway. Taxiway H would be required to be widened to the north since the terminal and aerotech business park would require larger aircraft to taxi down the taxiway. A portion of the pavement section was originally constructed to handle GA aircraft loads and would require to be reconstructed. The commercial apron would provide separation from GA traffic and would allow for a secure facility. The new parking lot would be able to accommodate all current and future passenger and airport staff demand, as well as rental car parking. The parking lot would not be shared with MHI RJ employees and therefore only require 589 parking spaces. The parking lot can also be configured to allow for separation of parking areas for charged parking.

The proposed terminal, connecting roads, and parking facilities for this alternative would be placed farther east than the Proposed Action, while allowing for a portion of the depression immediately east of Runway 21 to remain, the amount of overall available space decreases potential development. The aerotech business park will require the excavation of three million cubic yards of earth to create property that will be runway accessible. Excess fill material associated with flattening the existing hillside would be placed on airport property on the north side of WV 279, resulting in a larger project footprint. Approximately 800,000 cubic yards would be filled directly east of the cut area associated with the aerotech business park. The remaining 2.2 million cubic yards is proposed to be hauled across WV 279. The aerotech business park would be able to accommodate 770,000 SF of warehouse space over 70 acres for potential maintenance, overhaul and repair facilities, 100,000 SF of commercial space over 17 acres for aerodynamics and avionics sectors of the aviation industry, and a 30,000 SF airfreight building over three acres, totaling 90 contiguous acres. While this alternative does have direct runway access it does not allow for 100 contiguous acres for the aerotech business park and therefore, this alternative does not meet the purpose and need for the aerotech business park.

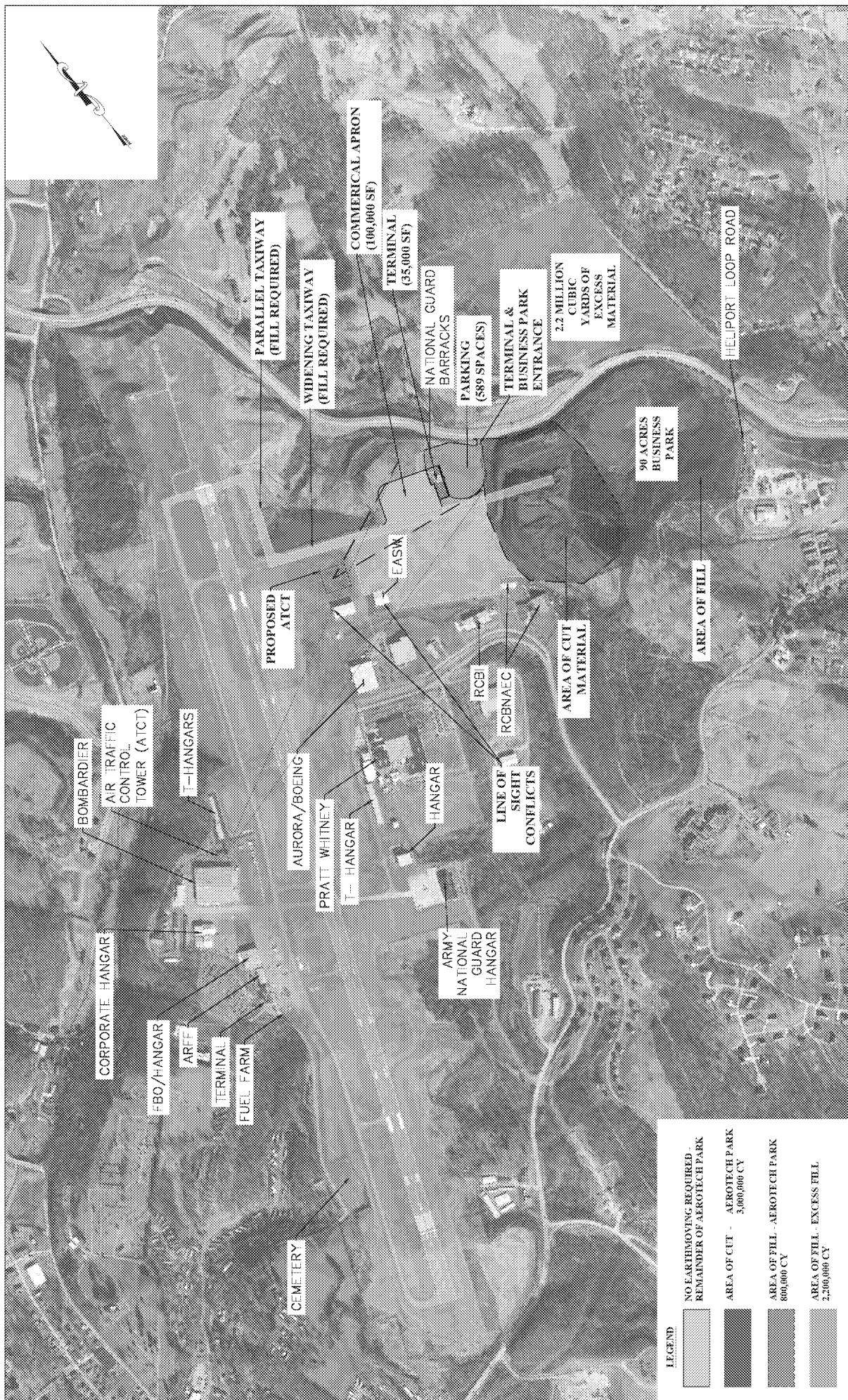


FIGURE 5 - ALTERNATIVE 2 DESIGN

THRASHER

2.5.2 Alternative 3: Renovate the Existing Terminal

Alternative 3 would involve expansion of the existing terminal and apron, construction of a parking garage, and the extension of Taxiway H into a 100 contiguous acre aerotech business park along with direct access to WV 279 (Figure 6). This alternative would not require the widening of Taxiway H or a new parallel taxiway, as these actions in the Proposed Action relate to moving the terminal across the airport property.

The terminal expansion would require renovating and reconfiguring the interior of the existing terminal (15,336 SF) and expanding the terminal by 9,000 SF to the south (two-story expansion). The expansion of the terminal is confined by Aviation Way, which runs in front of the terminal and will limit the ability to increase the terminal square footage. The total square footage achieved in this alternative is 24,336 SF, which is significantly less than the minimum required 35,000 SF which would not allow the new terminal to meet the current passenger and safety demands required by the airport and therefore does not meet the purpose and need.

The expansion of the terminal to the south would block the current truck re-fueling station of the underground fuel farm since the trucks re-fuel outside of the perimeter fence in the pavement area. The expansion of the apron would also be in the southern direction and would require the fuel farm to be completely relocated. There is property available at the end of Runway 3 that could be utilized for the construction of a new fuel farm.

The location of the commercial apron is located directly adjacent to the GA apron. Therefore, expansion is only viable in the southern direction. The existing apron would only be able to be increased from 21,200 SF to 68,580 SF. The 68,580 SF commercial apron would not allow for two commercial aircraft to be parked side by side simultaneously which would not meet the purpose and need under the current demand at the airport. A lack of separation between GA and commercial operations will also pose a security risk; a separation of these two functions is preferred by the airport. From a security and safety aspect, TSA requires that certain levels of secured areas (public, airport operations area [AOA], and secured) be maintained. The apron would not meet the requirements for current and future demand and therefore does not meet the purpose and need for apron expansion.

The existing main parking lot is bound by Aviation Way and cannot be expanded. Three additional smaller parking lots are located around the existing terminal. However, with the expansion of the terminal one of the parking areas would be eliminated. The two remaining parking lots can only accommodate a handful of vehicles. As the terminal would not be moved to the other side of the airport, the main parking lot would continue to be shared with MHI RJ employees therefore, to accommodate the current passenger/airport employee demand and rental car companies, as well as sharing the parking lot with MHI RJ employees, an approximate 714 - space parking garage would be constructed in place of the existing main parking lot. The increase of parking from the stated proposed action is due to the shared space with MHI RJ, so an additional 125 parking spaces is required to accommodate this existing business. The remaining two additional smaller parking lots could be used to separate employee/rental car parking which would allow the flexibility to charge for parking in the main parking garage.

The construction of the aerotech business park and extension of Taxiway H into this property requires the removal of three million yards of earthen material to create direct runway accessible property. Approximately 800,000 cubic yards would be filled directly east of the cut area. The remaining 2.2 million cubic yards is proposed to be hauled across WV 279 to a parcel of property owned by the airport to dispose of the excess cut material. Based on the proximity of the site to the runway, the aerotech business park would be able to accommodate approximately 770,000 square feet of building space covering 70 acres for aviation maintenance. Aerodynamics and avionics would be anticipated to utilize 200,000 square feet consuming 28 acres leaving the remaining two acres for airfreight for a total of 100 contiguous acres of direct runway access. Access into the aerotech business park would be off WV 279 and an access road would be required to be constructed. Therefore, this alternative meets the purpose and need for the aerotech business park.

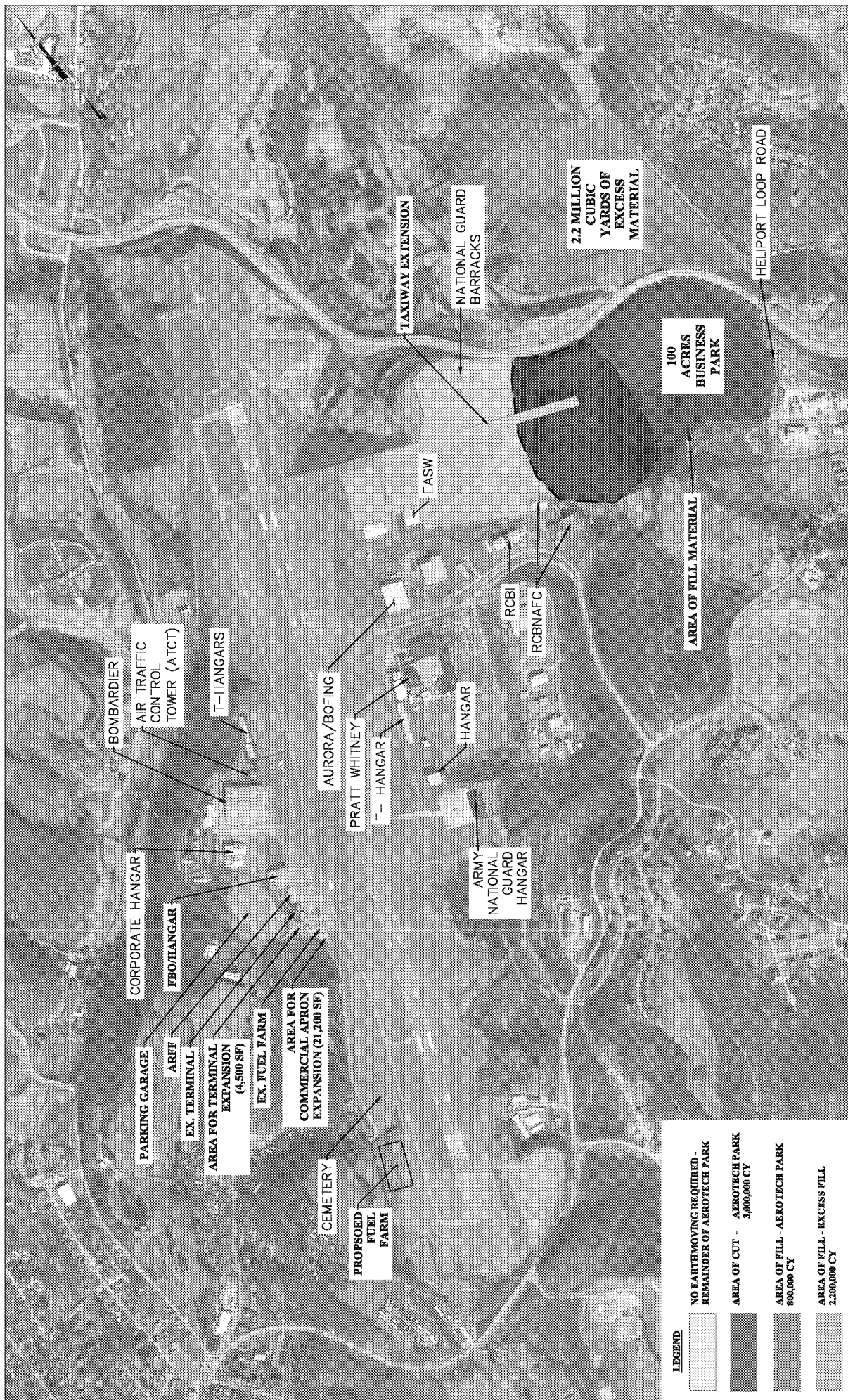


FIGURE 6 - ALTERNATIVE 3 DESIGN

THRASHER

2.5.3 Alternative 4: Relocate the Terminal into an Existing Hangar

Alternative 4 would involve the relocation of the existing terminal into an existing hangar (where the FBO is currently located) that is just north of the current terminal building, an approximate 714 space parking garage, the extension of Taxiway H into the aerotech business park, a 100 contiguous acre aerotech business park, relocation of the FBO to the existing terminal (after the hangar is converted to the new terminal), relocation of the fuel farm, and expansion of the existing GA apron (Figure 7). This alternative would not require widening of Taxiway H nor a new parallel taxiway, as these actions in the Proposed Action relate to moving the terminal across the airport property.

Currently just north of the existing terminal is an empty hangar that houses the FBO. The hangar would need to be renovated to accommodate for current passenger and safety demand requirements. The hangar would provide 27,000 SF for the terminal facilities. As stated in the updated Master Plan document, this is a short-term solution. Because the hangar is located to the north of the ARFF building, expansion to the south is not an option. Expansion of the hangar to the north is also not an option, as the airport has designated that space to MHI RJ for future expansion. The hangar renovation would not provide the required minimum 35,000 SF of terminal space needed to meet current passenger and safety demands at the airport and therefore does not meet the purpose and need for terminal development.

The FBO would be relocated to operate out of the existing terminal. The FBO would utilize the existing commercial apron as the new GA apron. This would require expansion of the apron in the southern direction, requiring the fuel farm to be completely relocated, since the existing commercial apron size is smaller than the GA apron. This would provide approximately 100,000 SF of commercial apron. There is property available at the end of Runway 3 that could be utilized for the construction of a new fuel farm.

The new terminal apron would be situated between the GA apron and public apron space, approximately 162,000 SF. This option is not favorable from a security and safety aspect. TSA requires that certain levels of secured areas (public, AOA, and secured) be maintained. Currently, CKB has designated the adjacent business (MHI RJ) as a public area. Therefore, a public area being located directly next to the secured area creates operational constraints and leaves CKB open to security risks. Therefore, this alternative defeats the purpose and need of providing a safe and secure airport operation.

The existing parking lot is bound by Aviation Way and cannot be expanded. Therefore, to accommodate the existing passenger/airport staff demand and rental car companies, as well as sharing the parking facilities with MHI RJ employees, an approximate 714-space parking garage would be constructed in place of the existing parking lot. The increase of parking from the stated proposed action is due to the shared space with MHI RJ, so an additional 125 parking spaces is required to accommodate this existing business.

The construction of the aerotech business park and extension of Taxiway H into this property requires the removal of three million yards of earthen material to create direct runway accessible property. Approximately 800,000 cubic yards would be placed directly to the east of the mountain that would be removed, creating 100 contiguous acres of property. The remaining 2.2 million yards would be hauled to the north of WV 279 to property owned by the airport. Based on the proximity of the site to the runway, the aerotech business park would be able to accommodate approximately 770,000 square feet of building space covering 70 acres for aviation maintenance. Aerodynamics and avionics would be anticipated to utilize 200,000 square feet consuming 28 acres leaving the remaining two acres for airfreight for 100 contiguous acres of direct runway access. Access into the aerotech business park would be off WV 279 and an access road would be required to be constructed. Therefore, this alternative meets the purpose and need for the aerotech business park.

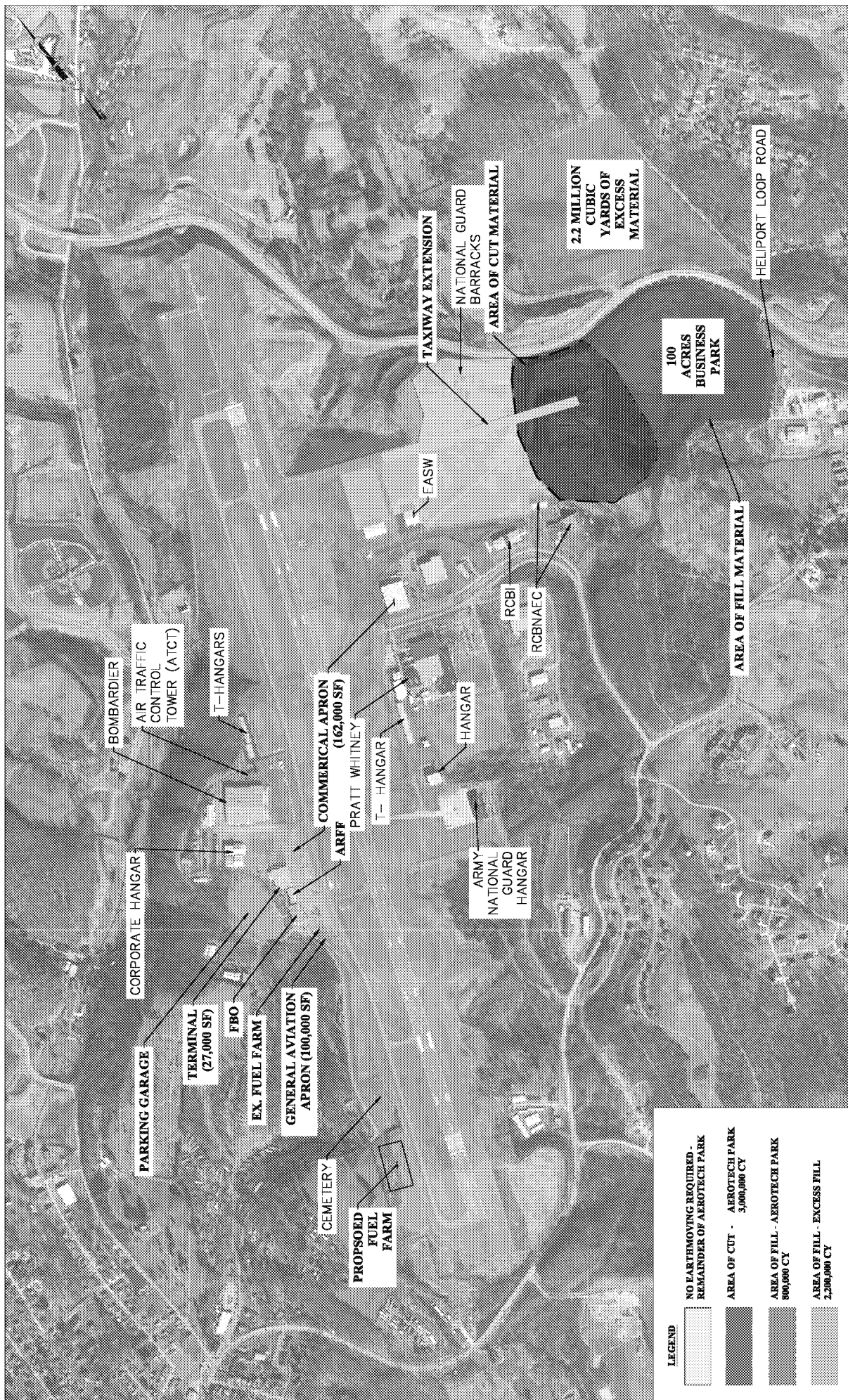


FIGURE 7 - ALTERNATIVE 4 DESIGN

THPASHER

2.5.4 Alternative 5: Develop Off-Site Property North of WV 279

An offsite area north of WV 279 has the potential to be developed into aeronautical facilities. This alternative would involve the construction of a new minimum 35,000 SF terminal, the construction of a minimum 100,000 SF commercial apron, and an approximate 50 contiguous acre aerotech business park. In order to pursue this alternative, CKB would have to purchase the privately owned 61-acre property, which is currently being used for agricultural hay production (Figure 8).

This property is separated from the main facilities of CKB by WV 279, a four-lane road. This property does not have direct access to the runway and is only 61-acres in size. It would not be practical or feasible to extend the taxiway across WV 279, and would result in the separation of terminal and runway, which is not operationally viable for an airport. If the taxiway was extended, structures such as a taxiway bridging of WV 279 would potentially need to be constructed. However, this property does meet the purpose and need of building a larger, safer terminal to meet current passenger demand and the ability to expand the apron to allow two commercial aircraft to be simultaneously parked side by side.

The acreage would also not allow the required area for construction of a 100 contiguous acre aerotech business park. Approximately 350,000 SF of building space allocated for warehouse, 100,000 SF of building space allocated for aerodynamics and avionics industries, and 30,000 SF of air freight could be constructed, significantly less than the required building requirements stated in the Market Study. This property would also be regulated by the imagery surface limiting the height of structures. The property would still have access onto WV 279 as the entrance to the terminal and aerotech business park. Access would be on the north side of the 4-lane divided highway. However, It would also not have direct access to the runway therefore, it does not meet the purpose and need for the aerotech business park.

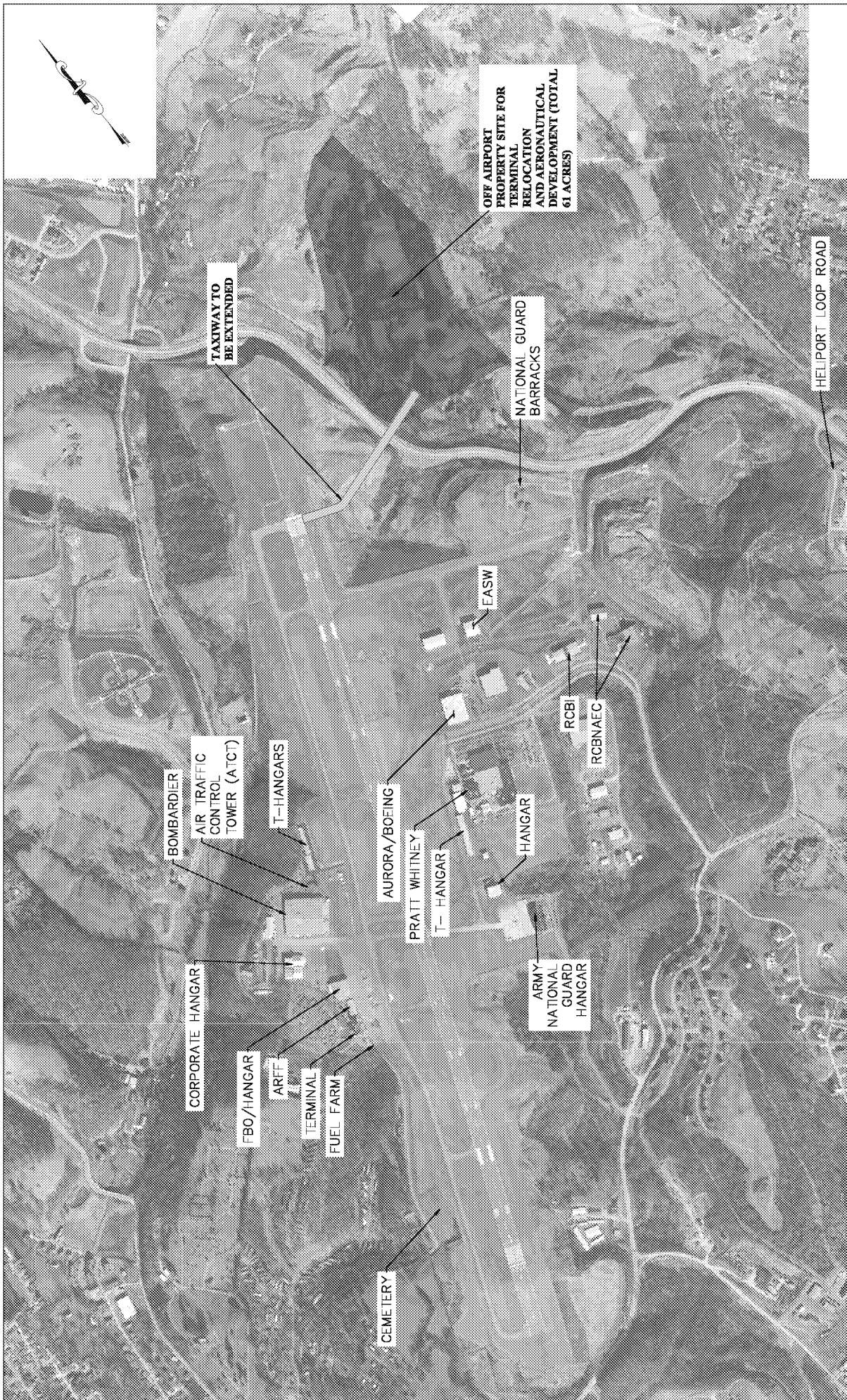


FIGURE 8 - ALTERNATIVE 5 DESIGN

THRASHER

Please see Table 4 below for screening criteria of the Proposed Action and alternatives.

Table 4: Screening Criteria

Criteria	Proposed Action	No-Action Alternative	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Does this meet the Purpose and Need?	Yes	No	No	No	No	No
Does this provide better customer experience and provide space for security requirements?	Yes	No	Yes	No	No	Yes
Can the movement areas be seen by the ATCT?	Yes	Yes	Yes, if buildings are removed or ATCT relocated	Yes	Yes	Yes
Does this provide safe movement of aircraft?	Yes	No	Yes	No	No	Yes
Can the new parking area be separated for charged parking?	Yes	No	Yes	Yes	Yes	Yes
Does this allow enough acreage to construct buildings that don't exceed the Part 77 surfaces?	Yes	No	No	Yes	Yes	No